

# ABSTRACT OF THE DISCLOSURE

A gradation correction curve creation apparatus for creating gradation correction curves for improving color reproducibility in UCR process includes a first gradation correction curve creation section creating a first gradation correction curve based on measured density values and target density values of monochromatic patches, a second gradation correction curve creation section creating a second gradation correction curve based on measured colorimetric values and target colorimetric values of gray patches, a start position calculation section calculating start positions on the first and second gradation correction curves at which the gray component in color mixture starts replacement with K through UCR process, and a gradation correction curve combining section creating a third gradation correction curve by smoothly connecting the more shadowed side of the first gradation correction curve than the start position and the more highlighted side of the second gradation correction curve than the start position.